

What is claimed is:

1. A canned motor-pump's structural improvement, which mainly has:
an outer shell; and

5 an inner shell, which is axially arranged in the said outer shell, and in
which an axis and a motor's rotor are axially installed, and two sides of the
axis are respectively arranged in an upper bearing and a lower bearing, and
the two bearings are respectively arranged in a bearing seat, the bearing seat
10 arranged at the upper portion of the axis is appropriately projected out the
outer shell in axial direction and, by a fastening ring fastened to the
projection section, the bearing seat is positioned at the upper portion of the
outer shell;

15 the inner shell has a bending structure, which is to form at least two
grooves surrounding the inner shell, and the openings of the adjacent
grooves are respectively faced the inner wall and the outer wall of the inner
shell, and there are washers arranged in the grooves;

 stator and coil are arranged between the said outer shell and inner shell,
and there is a seat arranged between the outer shell and the bottom of the
inner shell;

20 the inner shell is placed into the outer shell, and the upper edge of the
inner shell is clapped between the upper bearing seat and the outer shell, and
the bottom edge of the inner shell is welded to a seat for supporting the
bearing seat of the bottom and, when the outer shell is bolted to the pump
shell, the seat is insulated from the penetration of liquid by the sealing
25 washers, and the axis is extended into the pump shell and axially arranged to
impeller, such that a canned motor-pump's structure is constructed and, by
the tight inter-abutments of bearing seats, bending structure, washers and
outer shell, a sealing effect is achieved and the penetration of the liquid into
the coil is indeed prevented.

30 2. The canned motor-pump's structural improvement according to claim
1, the bending structure of the inner shell is arranged at the upper edge of the
inner shell, wherein:

the groove located inside the inner shell is recessed from the outer surface of the inner shell to the inside of the inner shell, and the adjacent groove is recessed from the inner surface of the inner shell to the outside of the inner shell, and an accommodation space is arranged between the outer shell and the bearing seat to accommodate the bending structure and the washers;

by the outer shell and the bearing seat, the grooves and the washers of the inner shell are clapped in the accommodation space, and the outer wall of the groove located inside the inner shell is abutted with the bearing seat, and the washer arranged in the inside groove is abutted between the inner wall of the groove and the outer shell, and the adjacent outer wall of the groove located at the outside of the inner shell is abutted to the outer shell, and the washer arranged in the outside groove is abutted among the inner wall of the outside groove, the bearing and the outer shell, and a multiple sealing effect is thereby formed.

3. The canned motor-pump's structural improvement according to claim 1, the bending structure is arranged at the upper edge and the bottom edge of the inner shell, wherein:

for the bending structure arranged at the upper edge of the inner shell, the groove located at the inside of the inner shell is recessed from the outer surface of the inner shell into the inner shell, and the adjacent groove is recessed from the inner surface of the inner shell to the outside of the inner shell, and an accommodation space, arranged between the outer shell and the upper bearing seat, may accommodate the bending structure and the washers arranged at the upper edge of the inner shell;

for the bending structure arranged at the bottom edge of the inner shell, the groove located at the inside of the inner shell is recessed from the inner surface of the inner shell to the outside of the inner shell, and adjacent groove is recessed from the outer surface of the inner shell into the inner shell, and there is a flange arranged between the outer shell and the lower bearing seat, and an accommodation space, arranged between the flange and the lower bearing, may accommodate the bending structure and the washers arranged at the bottom edge of the inner shell;

by the outer shell and the upper bearing seat, the grooves and the

washers located at the upper portion of the inner shell are clapped in the accommodation space and, by the flange and the lower bearing seat, the grooves and the washers located at the lower portion of the inner shell are clapped in the accommodation space, and the upper portion and the bottom portion of the inner shell are all provided with multiple sealing effect.

4. The canned motor-pump's structural improvement according to claim 3, wherein a wrinkling structure of wave's shape is axially arranged on the inner shell far away from the bending structures arranged at two sides of the inner shell, such that an appropriate tolerance is provided to the deformation of the inner shell.

5. The canned motor-pump's structural improvement according to claim 1 or 3, wherein the diameter of the bottom edge of the inner shell is approximately larger than the outer diameter of the inner shell, such that the inner shell has an inclining cone surface with narrow upper side and wide lower side.

6. The canned motor-pump's structural improvement according to claim 5, wherein a wrinkling structure of wave's shape is axially arranged on the inclining cone surface, such that an appropriate tolerance is provided to the deformation of the inner shell.

7. A canned motor's structural improvement, which mainly has:

an outer shell; and

an inner shell, which is axially arranged in the said outer shell, and in which an axis and a motor's rotor are axially installed, and two sides of the axis are respectively arranged in an upper bearing and a lower bearing, and the two bearings are respectively arranged in a bearing seat;

stator and coil are arranged between the said outer shell and inner shell;

the inner shell has a bending structure, which is to form at least two grooves surrounding the inner shell, and the openings of the adjacent grooves are respectively faced the inner wall and the outer wall of the inner shell, and there are washers arranged in the grooves;

the inner shell is placed into the outer shell and is inset between the outer shell and the bearing seat; by the tight inter-abutments of bearing seats,

bending structure, washers and outer shell, a sealing effect is achieved and the penetration of the liquid into the coil is indeed prevented.

8. The canned motor's structural improvement according to claim 7, the bending structure is arranged at the upper edge of the inner shell, and the bottom edge of the inner shell is clapped and welded between the corresponding bearing seat and a seat arranged in the outer shell, wherein:

the groove located inside the inner shell is recessed from the outer surface of the inner shell to the inside of the inner shell, and the adjacent groove is recessed from the inner surface of the inner shell to the outside of the inner shell, and an accommodation space is arranged between the outer shell and the bearing seat to accommodate the bending structure and the washers;

by the outer shell and the bearing seat, the grooves and the washers of the inner shell are clapped in the accommodation space, and the outer wall of the groove located inside the inner shell is abutted with the bearing seat, and the washer arranged in the inside groove is abutted between the inner wall of the groove and the outer shell, and the adjacent outer wall of the groove located at the outside of the inner shell is abutted to the outer shell, and the washer arranged in the outside groove is abutted among the inner wall of the outside groove, the bearing and the outer shell, and a multiple sealing effect is thereby formed.

9. The canned motor's structural improvement according to claim 7, the bending structure is arranged at the upper edge and the bottom edge of the inner shell, wherein:

for the bending structure arranged at the upper edge of the inner shell, the groove located at the inside of the inner shell is recessed from the outer surface of the inner shell into the inner shell, and the adjacent groove is recessed from the inner surface of the inner shell to the outside of the inner shell, and an accommodation space, arranged between the outer shell and the upper bearing seat, may accommodate the bending structure and the washers arranged at the upper edge of the inner shell;

for the bending structure arranged at the bottom edge of the inner shell, the groove located at the inside of the inner shell is recessed from the inner

surface of the inner shell to the outside of the inner shell, and adjacent groove is recessed from the outer surface of the inner shell into the inner shell, and there is a flange arranged between the outer shell and the lower bearing seat, and an accommodation space, arranged between the flange and the lower bearing, may accommodate the bending structure and the washers arranged at the bottom edge of the inner shell;

by the outer shell and the upper bearing seat, the grooves and the washers located at the upper portion of the inner shell are clapped in the accommodation space and, by the flange and the lower bearing seat, the grooves and the washers located at the lower portion of the inner shell are clapped in the accommodation space, and the upper portion and the bottom portion of the inner shell are all provided with multiple sealing effect.

10. The canned motor's structural improvement according to claim 9, wherein a wrinkling structure of wave's shape is axially arranged on the inner shell far away from the bending structures arranged at two sides of the inner shell, such that an appropriate tolerance is provided to the deformation of the inner shell.

11. The canned motor's structural improvement according to claim 7 or 9, wherein the diameter of the bottom edge of the inner shell is approximately larger than the outer diameter of the inner shell, such that the inner shell has an inclining cone surface with narrow upper side and wide lower side.

12. The canned motor's structural improvement according to claim 11, wherein a wrinkling structure of wave's shape is axially arranged on the inclining cone surface, such that an appropriate tolerance is provided to the deformation of the inner shell.

13. The canned motor's structural improvement according to claim 7, wherein the bearing seat arranged at the upper portion of the axis is appropriately projected out the outer shell in axial direction and, by a fastening ring fastened to the projection section, the bearing seat is positioned at the upper portion of the outer shell.